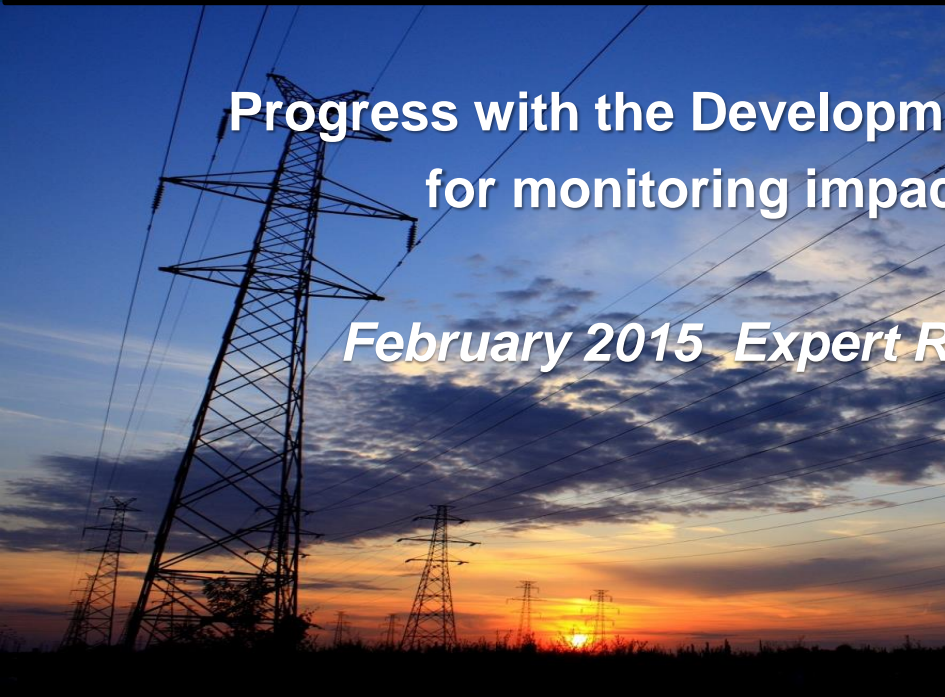




DEA National Electricity Grid Infrastructure Strategic Environmental Assessment



Progress with the Development of a Data Publishing Tool
for monitoring impacts on Birds and Bats

February 2015 Expert Reference Group meeting



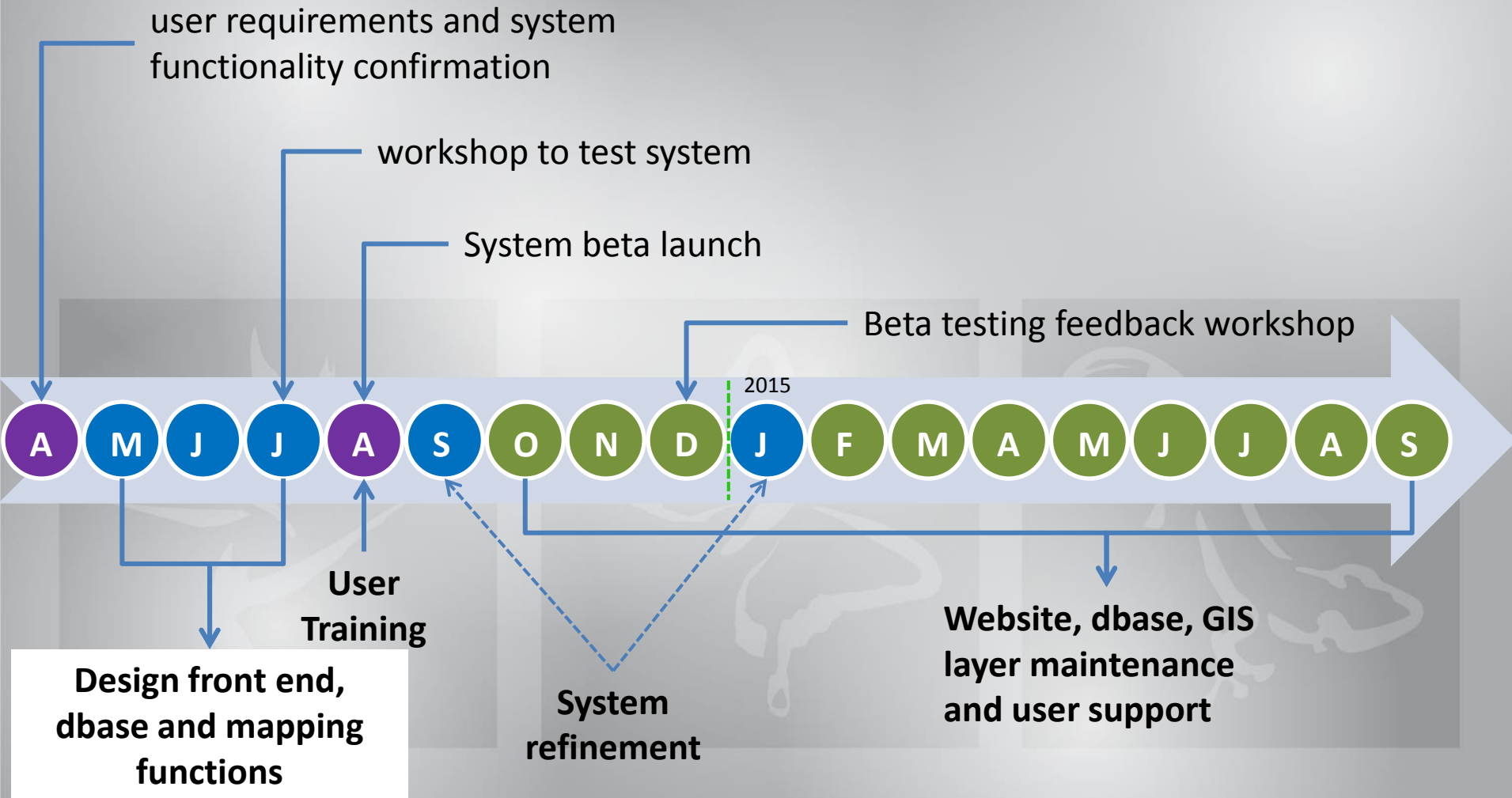
environmental affairs
Department:
Environmental Affairs
REPUBLIC OF SOUTH AFRICA



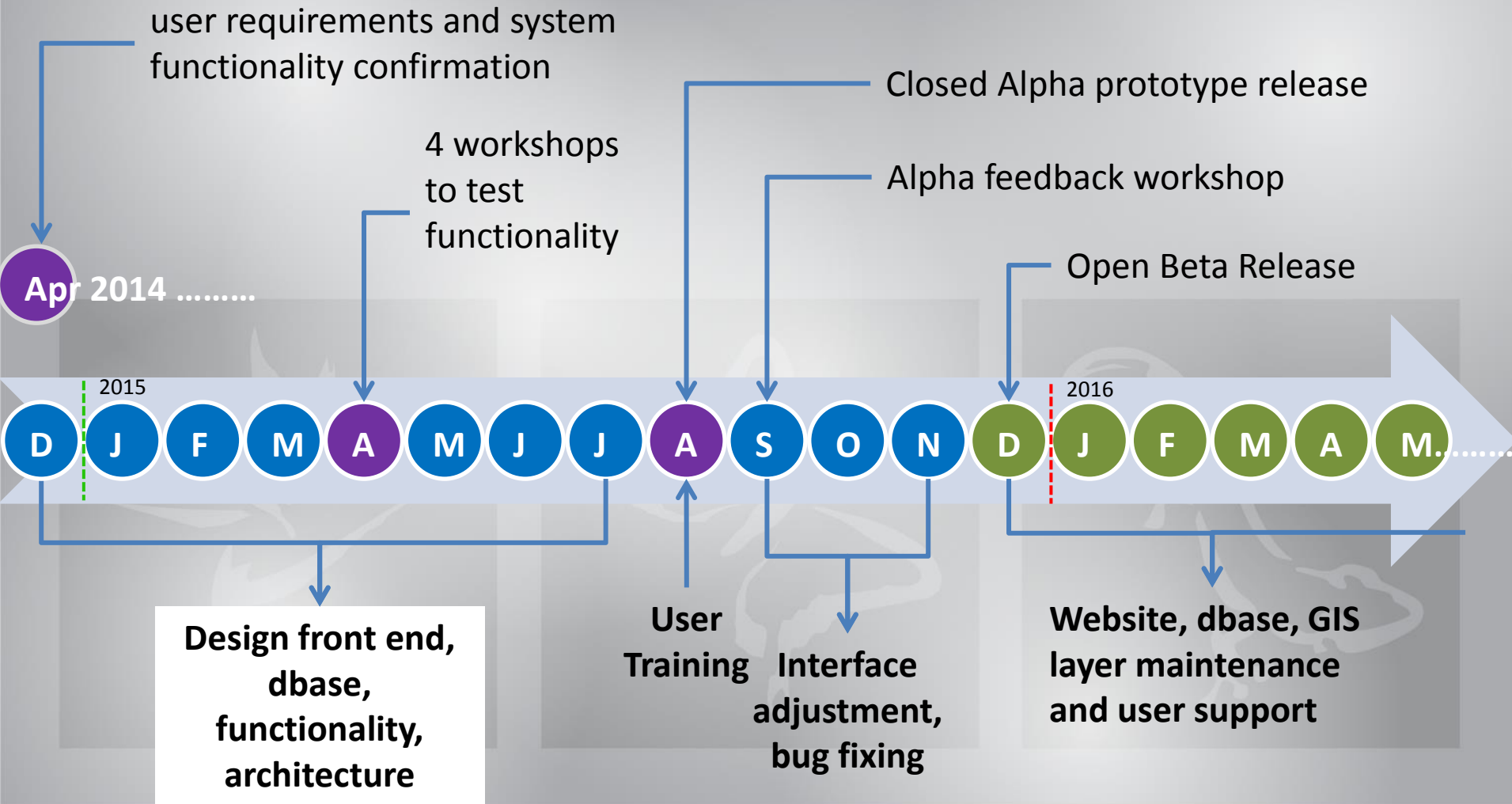
Scope of the tool

- Registration of users
- Uploading of bird and bat monitoring datasets
 - *Pre-construction and post-construction*
- Uploading of background datasets and old monitoring reports
 - *Atlasing, distribution maps*
- Review of datasets and incentives
- Searching and downloading datasets
- Free access through GIS portal

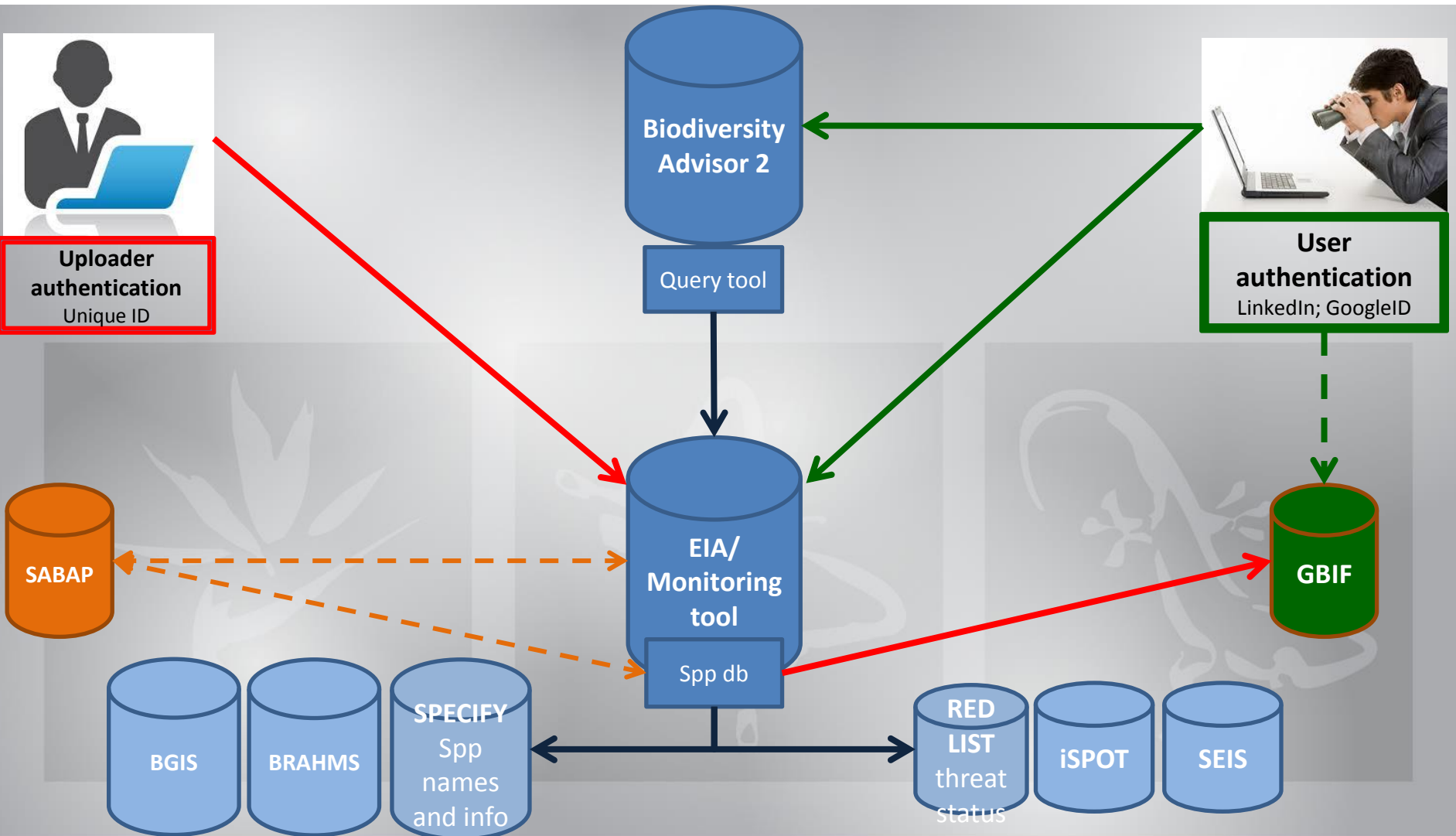
Process Timeline (Feb 2014)



Progress and Revised Process Timeline (Feb 2015)



Nesting the tool in an Information Architecture



DEA logo | EIA logo

Another DEA Link?

Visit SANBI's Biodiversity Advisor

View projects

Add a new project

[My account](#) | [Logout](#)

Welcome, Firstname Surname.

Your account type allows you to **view data** on the site. If you wish to upload data, please contact admin@eia.sanbi.co.za

Contact details

Email

Primary phone number

Profile information

First name

Surname

Email settings

Email me when projects are added with any of the following keywords:

Email me when projects are added to any of the following municipalities

Do we actually want to get people to register in order to view the data?

Change your password

Enter new password:

Repeat

Save

Search projects

Map view

Table view

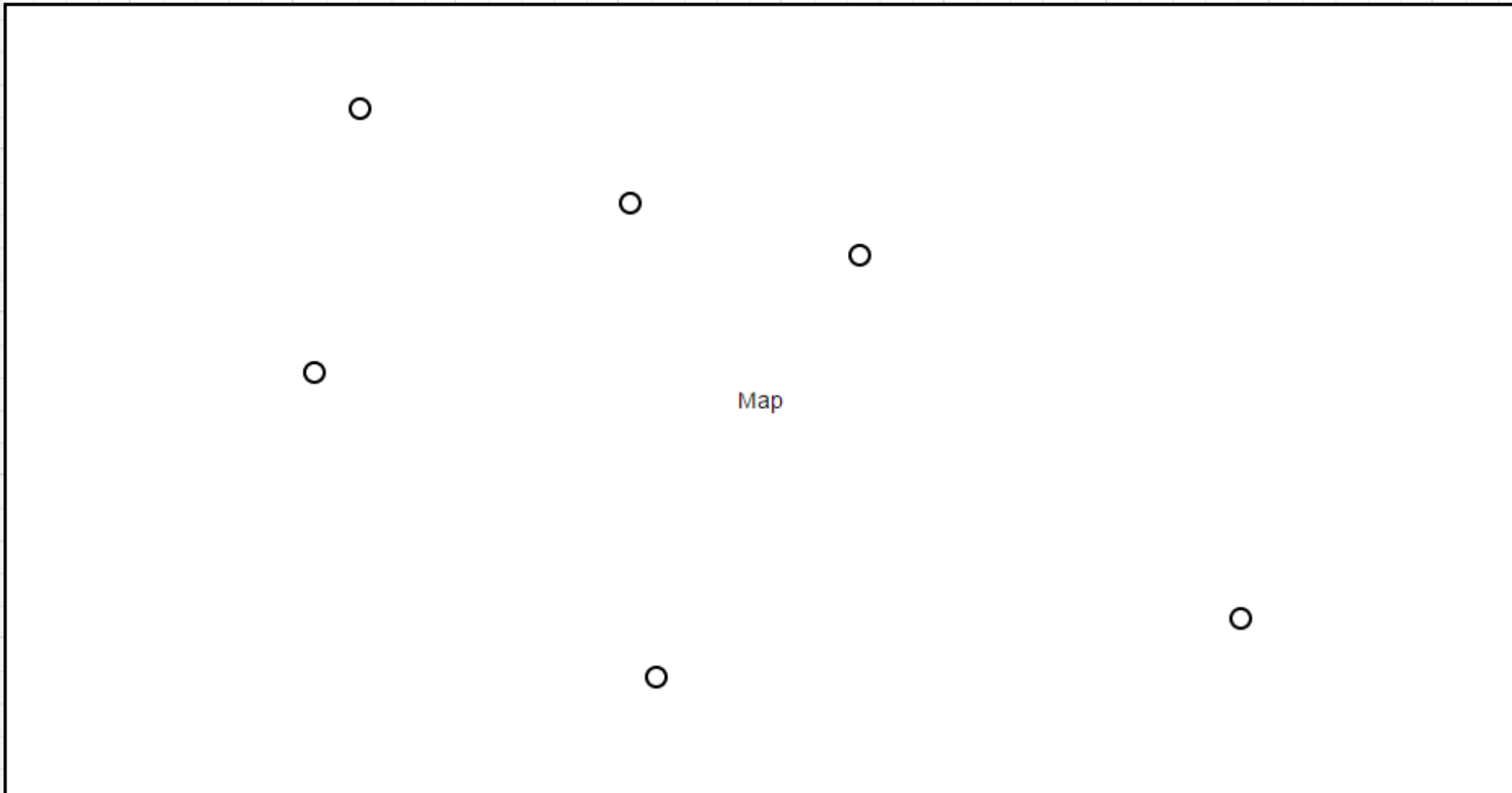
Project name

Developer

Uploader

Search

Reset



View projects

Map view

Table view

Project name Developer Uploader

Search

Reset

| ▼ Project name | ▼ Developer | ▼ Uploader | ▼ No. of datasets | ▼ Date uploaded | ▼ Last edited |
|--------------------------------|----------------------|------------------|-------------------|-----------------|---------------|
| Ladysmith Wind turbine project | Wind turbines inc. | Mogomotsi Mnguni | 2 | 3 Jan 2015 | 6 Feb 2015 |
| Windfarms for Africa | Lorem ipsum | Sed dictum | 12 | 22 Jan 2015 | 16 Mar 2015 |
| Neque porro | Wind turbines inc. | Mogomotsi Mnguni | 2 | 21 Apr 2015 | 22 Apr 2015 |
| Cras leo eros | Vivamus et vulputate | Mauris lobortis | 2 | 3 Jan 2015 | 6 Feb 2015 |
| Duis et lectus | Vivamus posuere. | Ut non | 2 | 3 Jan 2015 | 6 Feb 2015 |
| Etiam vel ante id In leo quam | molestie vel. | Pretium porta | 2 | 3 Jan 2015 | 6 Feb 2015 |
| Ladysmith Wind turbine project | Wind turbines inc. | Mogomotsi Mnguni | 2 | 3 Jan 2015 | 6 Feb 2015 |

DEA logo | EIA logo

Another DEA Link?

Visit SANBI's Biodiversity

View projects

Add a new project

[My account](#)



Add/edit a project

Project name

Coordinates

Site description

Independent survey Survey for a developer


EIA reference number

Select a developer



[Add a new developer](#)

Add comma-separated keywords

 Save project

New developer

Developer name

Company email address

Company phone number

Save developer

[Back to list of all projects](#)

Ladysmith wind turbine project [Edit project details](#)

Map of SA showing location of project

Development by: **Wind Turbines South Africa**
Project duration: **1 July 2010 to 1 July 2016**
Located in: **Ladysmith municipality, 24.67 E, 30.03 S**
EIA ref: #124234253 [EIA application PDF](#)

Keywords: renewable energy
Project created by John Smith on 1 Dec 2014

Site description: A marshy area in the valleys with strong north winds during winter

[Summary](#)[Project data log](#)[Turbine fatality data](#)[Vantage point data](#)[Transect data](#)[Focal site data](#)[Upload new data](#)

At a glance

15 datasets uploaded (13 pre-construction, 2 post-construction) by 5 different users

34 species sighted (20 LC Least Concern, 10 VU Vulnerable, 4 EN Endangered)

Datasets uploaded between 12 Jan 2012 and 22 Feb 2014

30 wind turbine fatalities to date

Project reports

[Report #1 Uploaded by Firstname Surname on 12 Dec 2013](#)

[Upload a new report](#)

Upload a new report

Please make sure that your file is named meaningfully

Ladysmith wind turbine project [Edit project details](#)

Map of SA showing location of project

Development by: **Wind Turbines South Africa**
Project duration: **1 July 2010 to 1 July 2016**
Located in: **Ladysmith municipality, 24.67 E, 30.03 S**
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[Summary](#)[Project data log](#)[Turbine fatality data](#)[Vantage point data](#)[Transect data](#)[Focal site data](#)[Upload new data](#)

| ▼ Uploader | ▼ Date uploaded | ▼ Covering timespan | ▼ Type of data | ▼ View |
|------------|-----------------|--------------------------|---|----------------------|
| John Smith | 5 Dec 2013 | 1 Nov 2013 - 20 Nov 2013 | Post-construction - Wind turbine fatalities | Link |
| John Smith | 15 Dec 2009 | 1 Nov 2009 - 20 Nov 2009 | Pre-construction - Transect | Link |
| John Smith | 25 Dec 2009 | 1 Nov 2009 - 20 Nov 2009 | Pre-construction - Transect | Link |
| John Smith | 5 Jan 2010 | 1 Nov 2009 - 20 Nov 2009 | Pre-construction - Focal site | Link |
| John Smith | 5 Dec 2009 | 1 Nov 2009 - 20 Nov 2009 | Pre-construction - Transect | Link |
| John Smith | 15 Dec 2009 | 1 Nov 2009 - 20 Nov 2009 | Pre-construction - Vantage point | Link |
| John Smith | 25 Dec 2009 | 1 Nov 2009 - 20 Nov 2009 | Pre-construction - Transect | Link |

Ladysmith wind turbine project

Upload new data entry [Or go back to all uploaded data for this project](#)

Choose data type:

Transect data ▼

Pre-construction data Post-construction data Control site

This data was collected from:

◀ April 22, 2012 ▶

| Su | Mo | Tu | We | Th | Fr | Sa |
|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

Select a time ▼

until:

◀ April 24, 2012 ▶

| Su | Mo | Tu | We | Th | Fr | Sa |
|----|----|----|----|----|----|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| 8 | 9 | 10 | 11 | 12 | 13 | 14 |
| 15 | 16 | 17 | 18 | 19 | 20 | 21 |
| 22 | 23 | 24 | 25 | 26 | 27 | 28 |
| 29 | 30 | | | | | |

Select a time ▼

Details about the collection:

People

Techniques

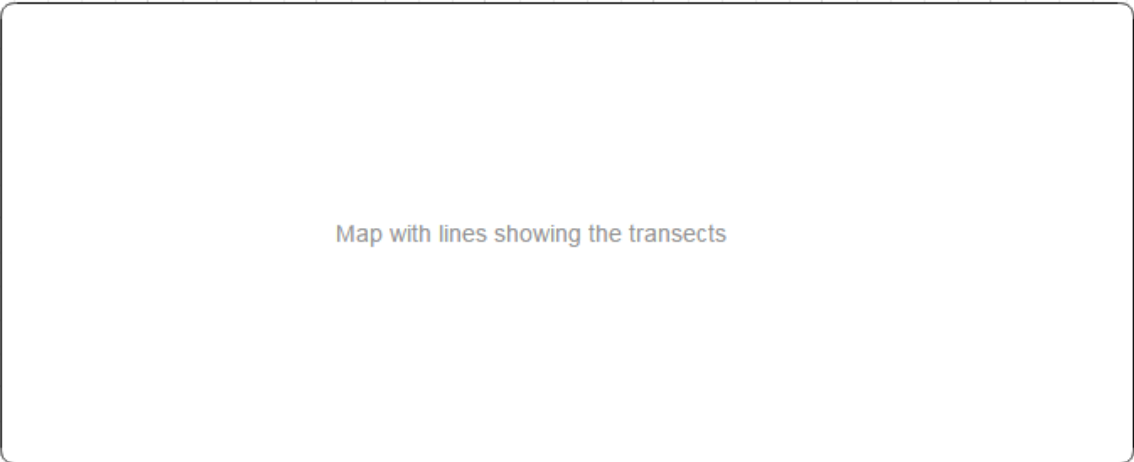
Site description (including weather, temperature, wind direction, etc)

Techniques used

Select any options which are applicable

Transect data

Choose the transect:



Map with lines showing the transects

ADD A TRANSECT

Transect description

Map where one can draw a straight A to B line

Save transect +

[Not listed? Add a transect to this project](#)

Add your data

Choose a species | Number present | Distance from transect line | Bird activity | Notes

Add another +

Finish and upload

- 1
- 2
- 3
- 4
- 5
- 5 - 10
- 10 - 20
- 20 - 30
- 30 - 50
- 50 - 100
- 100 - 200
- 200+

- 0 - 10m
- 10 - 30m
- 30 - 50m
- 50m +

- Foraging
- Perching
- Courtship
- Flying
- Territorial

Vantage point data

Upload flight paths jpeg ↗

Choose the vantage point from which this set of data was collected:

[No vantage points currently associated with this project. Add a vantage point to start](#)

ADD A VANTAGE POINT

Vantage point description

Map where one can put a pointer

Add vantage point +

Add your data

| | | | | | | |
|--------------------|------------------|--------------------|---------------------|---------------------------|--------------------|---------------------|
| Choose a species ▼ | Number present ▼ | Flight direction ▼ | Flight duration ▼ | Habitat ▼ | Activity ▼ | Height of flight ▼ |
| Add another + | 1 | North | under 5 minutes | Broad habitat description | passage flight | Low (<40m) |
| | 2 | North-east | 5 - 30 minutes | | soaring flight | Medium (40 - 120 m) |
| | 3 | South-east | 30 minutes - 1 hour | | display flight | High (120 - 150m) |
| | 4 | East | 1 hour - 2 hours | | territorial flight | Very high (>150m) |
| | 5 | North-west | 2 hours - 4 hours | | hunting/foraging | |
| | 5 - 10 | South-west | 4 hours + | | perching | |
| | 10 - 20 | West | | | courtship | |
| | 20 - 30 | South | | | territorial | |
| | 30 - 50 | | | | | |
| | 50 - 100 | | | | | |
| | 100 - 200 | | | | | |
| | 200+ | | | | | |

Finish and upload ↻

Focal site data

Choose the focal site:

Map with polygons showing focal sites

ADD A FOCAL SITE

Focal site description

Map where one can draw a circle or rectangle

Type of focal site Nesting site
Roost
Display/courtship area
Dam
Wetland
River/stream system
Estuary
Feeding ground
Salt pan
???

Save focal site +

[Not listed? Add a new focal site to this project](#)

Add your data

Choose a species

Number present

Bird activity

Notes

Add another +

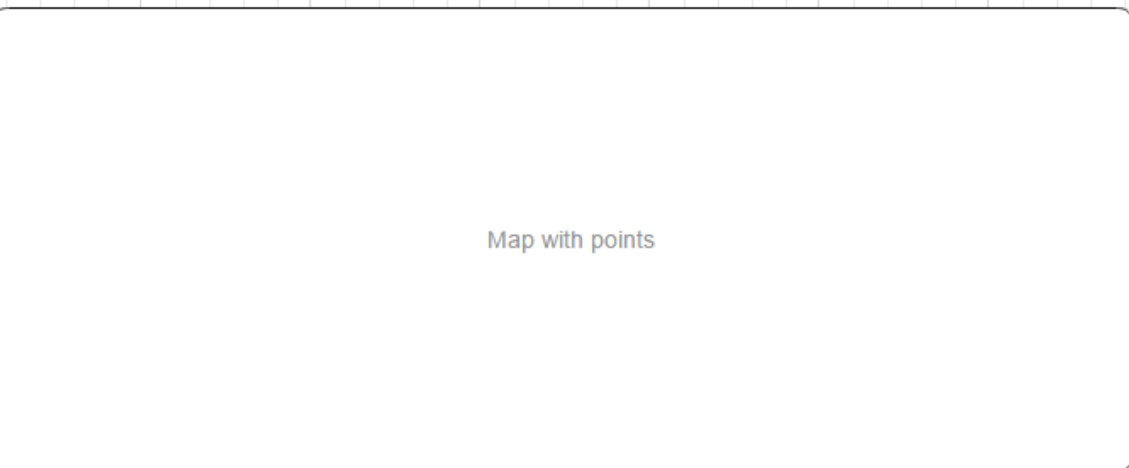
Finish and upload

- 1
- 2
- 3
- 4
- 5
- 5 - 10
- 10 - 20
- 20 - 30
- 30 - 50
- 50 - 100
- 100 - 200
- 200+

- Foraging
- Perching
- Courtship
- Flying
- Territorial

Wind turbine fatality data

Choose the turbine:



[Not listed? Add a new turbine to this project](#)

ADD A TURBINE

Turbine description

Map where one can add a point

Save focal site +

Add your data

Choose a species

Number of individuals

This number also includes estimates for corpses removed by scavengers

Notes

Add another +

Finish and upload

- 1
- 2
- 3
- 4
- 5
- 5 - 10
- 10 - 20
- 20 - 30
- 30 - 50
- 50 - 100
- 100 - 200
- 200+

Select a dataset from the dropdown:

Post-construction data captured between 12 Dec 2013 (06:00) and 12 Dec 2013 (08:00) - Uploaded by John Smith on 1 Jan 2014

Techniques used: None selected

Description of how data was captured, the people involved and a description of the site. Lorem ipsum dolor sit amet, consectetur adipiscing elit. Nulla quam velit, vulputate eu pharetra nec, mattis ac neque. Duis vulputate commodo lectus, ac blandit elit tincidunt id. Sed rhoncus, tortor sed eleifend tristique, tortor mauris molestie elit, et lacinia ipsum quam nec dui. Quisque nec mauris sit amet elit iaculis pretium sit amet quis magna. Aenean velit odio, elementum in tempus ut, vehicula eu diam. Pellentesque rhoncus aliquam mattis. Ut vulputate eros sed felis sodales nec vulputate justo hendrerit. Vivamus varius pretium ligula, a aliquam odio euismod sit amet. Quisque laoreet sem sit amet orci ullamcorper at ultricies metus viverra. Pellentesque arcu mauris, malesuada quis ornare accumsan, blandit sed diam.

[Download flight paths](#)

| ▼ Species | ▼ Number present | ▼ Flight direction | ▼ Flight duration | ▼ Habitat | ▼ Type of flight | ▼ Height of flight |
|-----------------|------------------|--------------------|-------------------|-----------|------------------|--------------------|
| Cape Rockjumper | 4 | North | 5 - 30 minutes | ? | Passage | Low (< 40m) |
| Blue Crane | 3 | South | 5 - 30 minutes | ? | Passage | High (120 - 150m) |
| Black Harrier | 2 | East | 5 - 30 minutes | ? | Display | Low (< 40m) |
| Cape Cormorant | 3 | South | 5 - 30 minutes | ? | Passage | High (120 - 150m) |
| Cape Rockjumper | 4 | North | 5 - 30 minutes | ? | Passage | Low (< 40m) |
| Blue Crane | 3 | South | 5 - 30 minutes | ? | Passage | High (120 - 150m) |
| Black Harrier | 2 | East | 5 - 30 minutes | ? | Display | Low (< 40m) |
| Cape Cormorant | 3 | South | 5 - 30 minutes | ? | Passage | High (120 - 150m) |

Conclusion

- The wireframes thus far cover all of the interactions for the system **for birds**.
- The other types of data (wind turbine fatalities, transects and focal sites) are viewed in a similar way to vantage points.
- Still need to resolve permissions and quality control w.r.t. editing projects/adding data to projects.

Discussion

